Appl. No. 10/816,708 Filed: April 2, 2004

and the crystal has P6(5)22 symmetry.

 (Currently Amended) A process for co-crystalizing mammalian Glucokinase (Seq ID NO:1) (SEQ ID NO:1) and an allosteric ligand of Glucokinase, the process comprising:

providing a buffered, aqueous solution of 9 to 22 mg/ml of the mammalian Glucokinase (SEQ ID NO:1);

adding a molar excess of the allosteric ligand to the aqueous solution of mammalian Glucokinase; and

growing crystals by vapor diffusion using a buffered reservoir solution of 16% to 25% PEG, 0% w/v to 30% w/v glucose and 8 to 10 mM DTT, wherein the PEG has an average molecular weight of about 8,000 to about 10,000—, wherein further the ligand is selected from the group consisting of 3-Cyclopentyl-2-pyridin-4-yl-N-thiazol-2-yl-propionamide, N-(5-Bromo-pyridin-2-yl)-2-(3-chloro-4-methanesulfonyl-phenyl)-3-cyclopentyl-propionamide, 2-(3-Chloro-4-methanesulfonyl-phenyl)-3-cyclopentyl-N-(5-trifluoromethyl-pyridin-2-yl)-propionamide, (2S)-2-[3-Cyclopentyl-2-(3,4-dichloro-phenyl)-propionylaminol-thiazole-4-carboxylic acid methyl ester, (2S)-(2-[3-Cyclopentyl-2-(3,4-dichloro-phenyl)-propionyl-yl-propionyl-yl-propionyl-yl-propionyl-yl-propionyl-yl-ga, and (2S)-13-Cyclopentyl-2-(3,4-dichloro-phenyl)-propionyl-yropionyl-ureido)-acetic acid ethyl ester.

4. (Currently Amended) The process of claim 3, wherein the step of growing crystals by vacor diffusion comprises:

streaking the buffered, aqueous solution of mammalian Glucokinase (Seq ID NO:1) (SEQ ID NO:1) with added allosteric ligand on a surface to form an elongated droplet of protein solution, and

streaking about an equal amount of the buffered reservoir solution across the elongated droplet of protein solution, forming a combined droplet shaped like the letter 'X'.